## REMARKS

Claims 62, 73, 74 and 77 have been canceled.

Applicants have amended the remaining Claims so they now read in the style of allowed Claim 63. Specifically:

Claim 60 has been amended to remove reference to 60 contiguous nucleotide regions in part (b) so that the percent identity is now measured against the whole of the listed SEQ ID NO's.

Claim 61 has been amended to remove amino acid SEQ ID NO's and to specify specific nucleic acid SEQ ID NO's.

Claim 64 has been amended in part (a) to specify proteins have 40 (instead of 50) contiguous amino acids identical to the stated SEQ ID NO's. In addition, the language requiring the 40 amino acid region bind an IL-13 protein has been removed.

Claim 66 has been amended to clarify the different regions of the fusion protein. The term 'domains' has been removed and the chimeric nucleic acid molecule is now described as composed of two sequences whose characteristics are described in the claim.

Claims 68, 69 and 70 have been amended by the removal of the term 'domain.

Applicants believe the language of these claims, along with that of Claim 66 from which they depend, is now easier to read and understand.

Claim 71 has been amended to specify sequences within the chimeric nucleic acid molecule be 95% identical to stated SEQ ID NO's; in addition, a functional limitation has been added for the claimed nucleic acid molecules.

Claim 72 has been amended to specify particular sequences for the chimeric nucleic acid molecule.

Claim 75 has been amended to clarify the language. The claim now uses specific SEQ ID NO's instead of the term "IL-13Ra2 domain" when referring to portions of the fusion protein.

Claim 76 has been amended to included several more SEQ ID NO's already present in other Claims.

Claim 78 has been amended so the therapeutic composition now contains protein instead of nucleic acid molecules. This claim has also been made dependent from Claim 64.

Claim 80 has been amended in part (a)(ii) so that the percent identity is measured against the whole of the stated SEQ ID NO. Finally, a functional requirement for short amino acid sequences identical in sequence to regions from stated SEQ ID NO's has been removed.

Accordingly, Applicants submit no new matter has been entered into the Application.

## II. Rejections under 35 U.S.C. §112, second paragraph

The Examiner has rejected claims 75-79 as being indefinite for failing to point out and distinctly claim the subject matter which the Applicant regards as the invention. Specifically, the Examiner states the limitation 'canine IL-13Ra2 protein domain' is indefinite since the protein is referred to only by name and the claim lacks any associated structural limitation. Applicants note the term "IL-12Ra2 protein domain" has been removed and specific SEQ ID NO:'s have been added to the language of Claim 75 to provide a structural limitation.

## III. Rejections under 35 U.S.C. §112, first paragraph

The Examiner has rejected previous claims 60, 64, 66-70, 72-75 and 78-80 under 35 U.S.C. §112, first paragraph, stating that while the specification is enabling for "...nucleic acids disclosed as SEQ ID NO:54, 56, 57, 59, 60, 62-65, 67, 68 or 70 or fragments thereof (of specific lengths) or species which vary by codon degeneracy therefrom, as well as with proteins encoded thereby or fragments of said proteins that retain binding function...", it is not enabling for any nucleic acids only 95% identical to a 60 nucleotide fragment of any of said sequences nor nucleic acid molecules comprising as little as 40 nucleotides which encode proteins that bind canine IL-13. The Examiner further states the specification does not disclose which portion of the protein is required for binding activity and that undue experimentation would be required of the skilled artisan to make and/or use the claimed invention in its full scope. Finally, the Examiner has stated the art of gene therapy, and in dogs in particular, is not considered to be routine or predictable in the art and in the absence of any specific guidance and working examples in the specification, claims to such therapy are not enabled.

Applicants note the claims have been amended to remove reference to short regions of a protein or nucleic acid molecule having some percentage identity with the given SEQ ID NO's. The claims have been drafted so that percent identities be compared to the whole of the given SEQ ID NO's. In addition, Applicants have removed any functional requirement from claims

referring to short regions of protein, or nucleic acid sequence, identical in sequence to regions of stated SEQ ID NO's.

With respect to claims referring to gene therapy, Applicants note such claims have been amended so that the therapeutic compositions now comprise protein instead of nucleic acid molecules.

## Conclusion

Applicants have amended the Claims in view of the Final Office Action, mailed April 21, 2003, the Advisory Action, mailed August 6, 2003, and the telephone conversations with the Examiner on August 12, 2003. In view of the above amendments and remarks, Applicants believe the Claims are in condition for allowance and solicit such from the Examiner. Should any issues remain unresolved, or should the Examiner have any questions regarding this Application, the Examiner is invited to contact the undersigned.

Respectfully submitted,

Dated: August 12, 2003

Richard J. Sterp, Ph.D. Registration No. 50,668

Heska Corporation
1613 Prospect Parkway

Fort Collins, Colorado 80525

Telephone: (970) 493-7272 Facsimile: (970) 491-9976